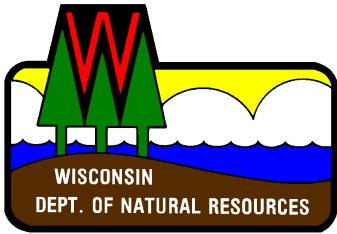


Ozone Redesignation and Maintenance Plan Update

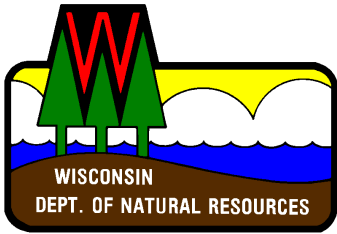
April 2002 - CAA-TF Meeting



Redesignation to 1-Hr Ozone Attainment

Why are we proposing redesignation?

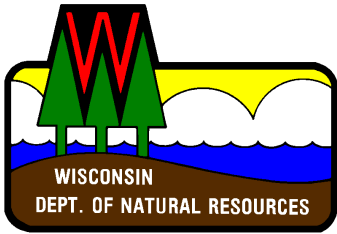
- ◆ Met Ambient Ozone Standard during 1999-2001
- ◆ Achieved an Important AQ Improvement and Air Emissions Regulation Milestone
- ◆ Level the Playing Field for appropriate Economic Development (New Source Requirements)
- ◆ “Clear the Decks” for 8-Hour Ozone/PM/Haze Planning



Redesignation to Attainment

Requirements for Redesignation

- ◆ Attainment of the NAAQS
- ◆ All Section 110 and Part D Requirements Met
- ◆ Fully Approved Ozone SIP
- ◆ Improvement in Air Quality Due to Implementation of Permanent and Enforceable Measures
- ◆ Fully Approved Maintenance & Contingency Plans



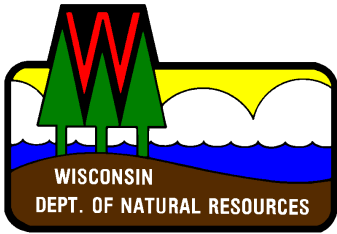
Redesignation Process

◆ **Required State Actions**

- Develop Necessary Technical Documentation
- Hold Hearing to adjust Standing Ozone SIP
- Notice when Federal Action changes State Requirements

◆ **Federal Redesignation Process**

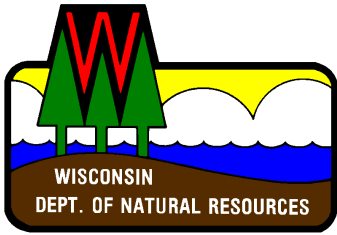
- State Develops Documents for Required Elements
- State Holds Hearing & Submits SIP Revision to EPA
- EPA Evaluates Proposal
- EPA Proposes Approval (Fed Register)
- EPA Publishes Final Notice



Maintenance Plan Elements

Key Elements of a SE-WI Maintenance Plan

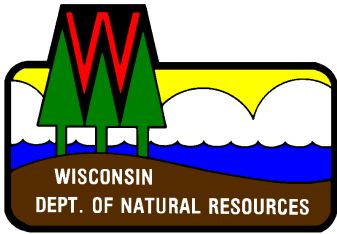
- ◆ Emissions Inventories
 - Year Designated Nonattainment (1990)
 - Year of Monitored Attainment (1999-2001 DV)
 - Year of Modeled Attainment (2007)
 - 10 Years Beyond Attainment (2012)
- ◆ Demonstration of Attainment/Maintenance for 10 Years
- ◆ Commitment to Maintain Monitoring Network



Maintenance Plan Elements

Elements of SE-WI Maintenance Plan (Cont.)

- ◆ Verification of Continued Attainment
 - Legal Authority to Implement Measures
 - Tracking of Attainment
- ◆ Contingent Control Measures Plan
- ◆ Commitment for a Revised Maintenance Plan in 2010 for the period 2012-2022
 - *(eight years out for years 11 through 20)*

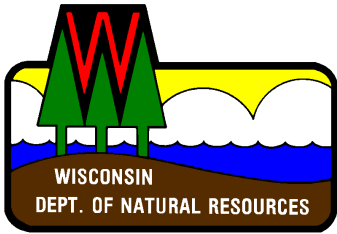


Maintenance Plan Details

Contingent Control Measures

“The Contingency Plan”

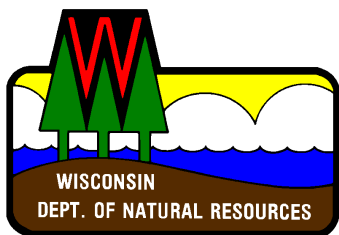
- ◆ Measures Clearly Identified
- ◆ Triggers or Process for Invoking Measures
- ◆ Major Issues:
 - Geography of Trigger and Potential Control Areas
 - Timing and Scope of Contingent Responses
 - Evaluations based on Elevated AQ or Emissions Levels
 - Depth/Breadth of Controls based on Violations
 - Speed of Control Effort Response



Maintenance Plan Details

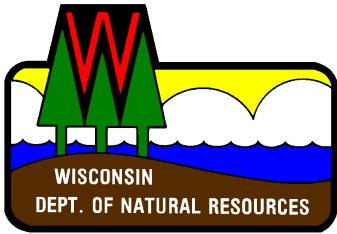
Contingency Control Measures (Cont.)

- ◆ Need to Be Enforceable and Permanent
- ◆ Earlier examples noted at stakeholder sessions:
 - **Mobile On-Highway - Stricter Freeway Speed Control**
 - **Mobile Off-Road - Adoption of California Engine Regs**
 - **Area - Adopt California Paint (AIM VOC Limits) Regs**
 - **Point - NOx Control on Medium Size Boilers**
 - **Certain Specified & Quantifiable Voluntary Measures**



Working Redesignation Schedule 2001 - 2002 - Technical Support

End of Ozone Season	October 15, 2001
Pursue IL/IN/EPA Dialogue - Redesignation Elements/Scope/Timing	Oct-Mar 2001/2002
Submit QA'd Ozone Data to AIRS	January 2002
Develop Maintenance Inventories	Jan/Apr 2002
Develop General Maintenance Plan	Jan/Apr 2002



Redesignation Schedule - Legal Process

State Hearing

Early June 2002

**Work w/ EPA on
Submittal & Parallel
Processing**

May/June 2002

**EPA's Proposed
Approval**

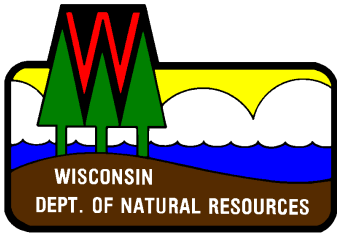
Summer 2002

EPA Comment Period

Late Summer 2002

EPA's Final Approval

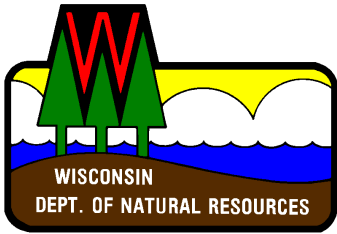
Fall 2002 ?



Redesignation to Attainment

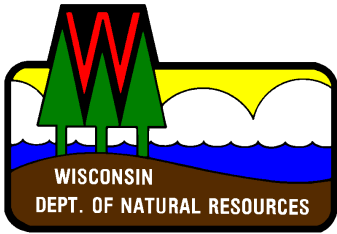
Summary of Remaining Steps

- ◆ Resolve Contingency Issues w/ IN, IL and EPA
- ➔ **Review Plan Outline with Stakeholders**
- ◆ Complete Formal Redesignation Steps
 - **Finalize Maintenance Plan Documentation**
 - **Finalize Base and Projection Inventories**
 - **Public Hearing Draft & Notice - Target: April 30**
 - **2 Hearings scheduled in June (if travel permitted !)**



Maintenance Plan Outline

- ① Monitored Attainment AQ at Critical Sites
- ② Fully-Approved Regional Ozone 1-Hr Attainment Plan & Complete SIP
- ③ Showing that Real, Enforceable and Permanent Measures are basis for AQ Improvement (***Inventories***)
- ④ Contingent Emissions Control Plan
- ⑤ Updated Conformity Budgets

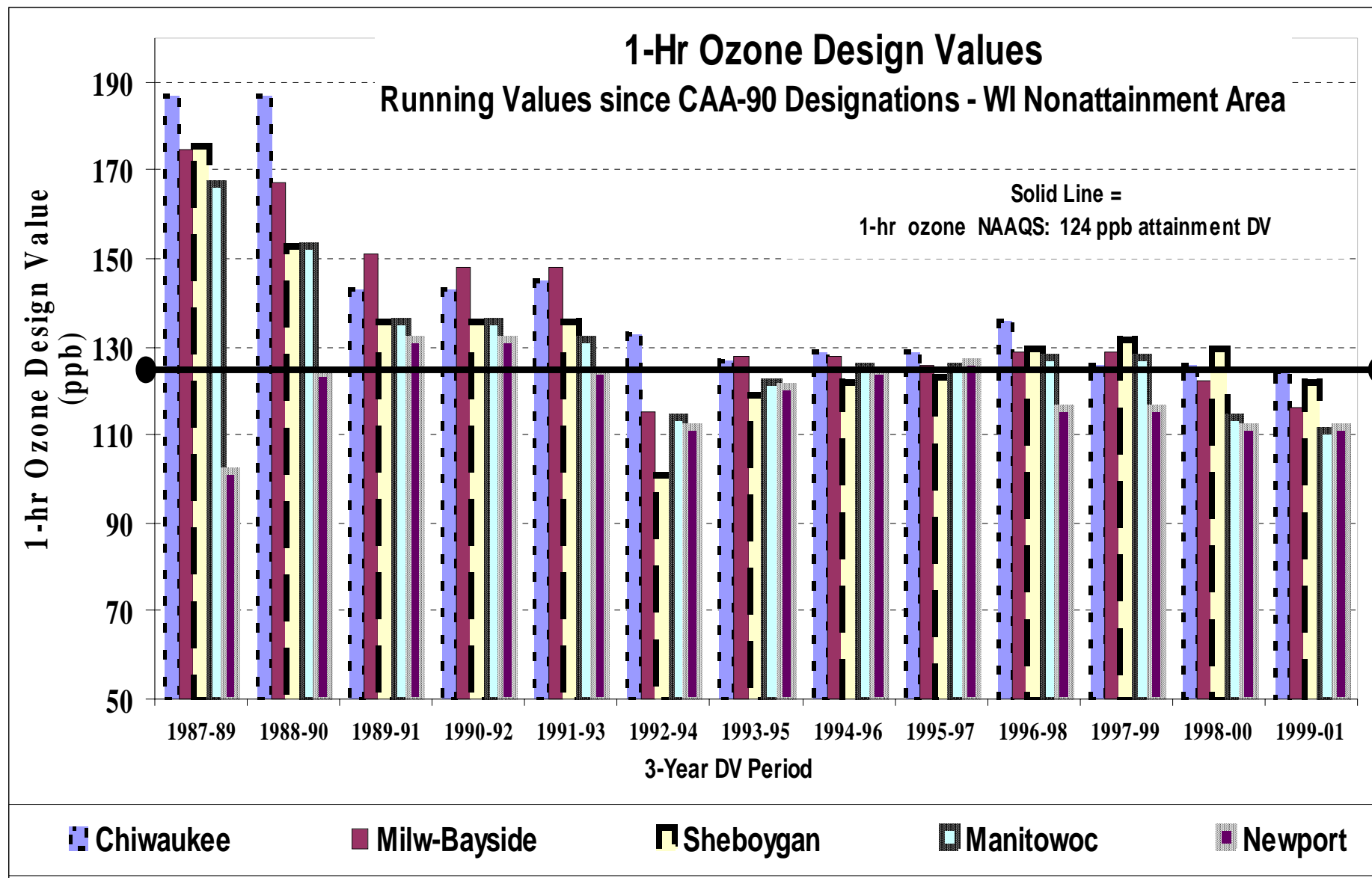


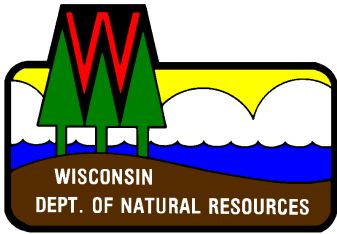
① *Monitored Air Quality*

Monitored Ozone Air Quality Attainment :

- ◆ Meets 124ppb Design Value Limit for 1999-2002
- ◆ Design value is consistent with a Historic Regional Air Quality Trend
- ◆ Air Quality Maintenance is shown by 2007 Attainment Demonstration as well as projected maintenance inventories

① *Monitored Air Quality*

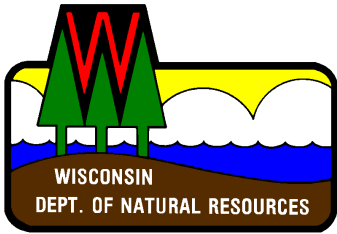




② *Approved Ozone SIP and Related Programs*

General Section 110 & Part D AQ Control Program (*Subpart 1 and earlier CAA Sections*)

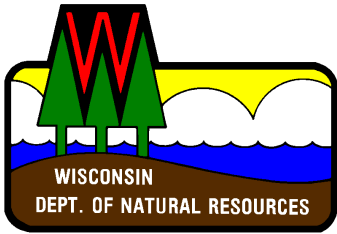
- ◆ Approved Monitoring Program & Forward Commitment
- ◆ Approved Permitting Program
- ◆ Viable Inventory Reporting Structure
- ◆ General SIP Planning & Development and AQ Reporting Capability, Rules and Authority
- ◆ Appropriate Conformity Structures
- ◆ General Enforcement Authorities



② *Approved Ozone SIP and Related Programs*

Approved WI Ozone Attainment SIP (*Subpart 2*)

- ◆ Specified WI Emissions Control Programs (92-94)
 - I/M
 - RACT
 - **Stage 2 Vapor Recovery**
- ◆ Additional WI Rate-of-Progress Components
 - **Initial 15% ROP Plan (1993/94)**
 - **1999 and 2002-2007 ROP Plans**
- ◆ Additional Modeled-Attainment Components
(eg-regional controls assumed in the 2007 SIP)
 - **NOx SIP Call and Section 126 Plans (Upwind States)**
 - **Newer federal measures**



③ *Maintenance Plan Inventories*

Historic Baseline Emission Inventory(EI) - 1990

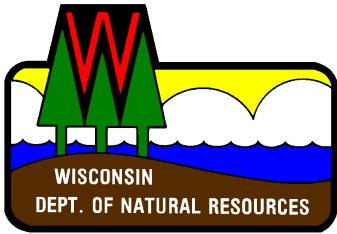
- Consistent with final CAA-90 designations initially based on 1987/88/89 Design Values
- Consistent w/ 1990 Baseline for Rate-of-Progress Demonstrations and early regional inventories

◆ **Problems/Issues:**

- New/Refined Inventory Techniques, Models & Inputs
- Differing Modeling vs Milestone vs ROP Inventory Approaches - Activity, Time-scales, Geography

◆ **Solutions:**

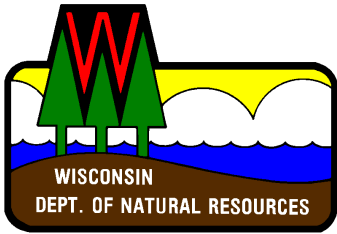
- Consistent approach where possible
- Some backcasting from “better” later year inventories



③ *Maintenance Plan Inventories*

Ozone Attainment Year Inventory - 1999 EI

- Any one of the 1999-2001 Design Value Years
- 1999 most consistent with milestone/ROP timelines
- Not an “extra” inventory effort - preliminary work focused on 1999
- ◆ Issues:
 - New/Refined EI Techniques, Models & Inputs
 - Steep Inventory Learning Curve - Accelerated Effort
 - Less prior Q/A & documentation on certain sectors means tougher to ensure maintenance in early years of 2000's



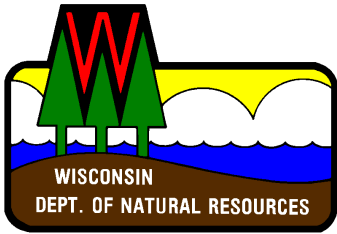
③ *Maintenance Plan Inventories*

Modeled Attainment Year Inventory - 2007 EI

- Demonstration of Maintenance needs to be consistent with recently approved demonstration of attainment
- Demonstration that real, permanent and enforceable measures in the SIP are the basis of attainment

◆ Issues:

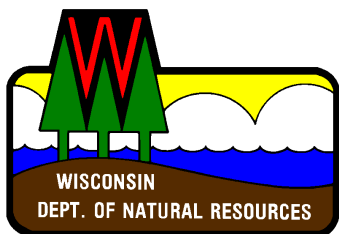
- Refined EI models/techniques & activity even from the recent attainment demonstration
- Aggregate “refined” 2007 EI must not exceed the modeled inventory - yet need to update budgets



③ *Maintenance Plan Inventories*

Projected Maintenance Inventory - 2012 EI

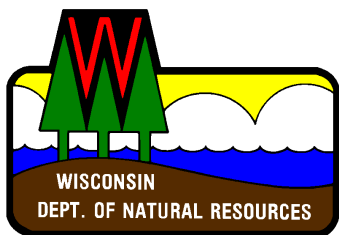
- ◆ Formal Redesignation Request Requirement as part of first 10 year maintenance demonstration:
 - Lower than 1999 and 1990 comparison years
 - Consistent assumptions (activity, controls and emissions trends) with those in the 2007 regional demonstration and adopted national programs
- ◆ Issues:
 - Projections of EI control through 2012 (i.e. nonroad)
 - New Milestone and Conformity Assessment Year with Accelerated Development Effort



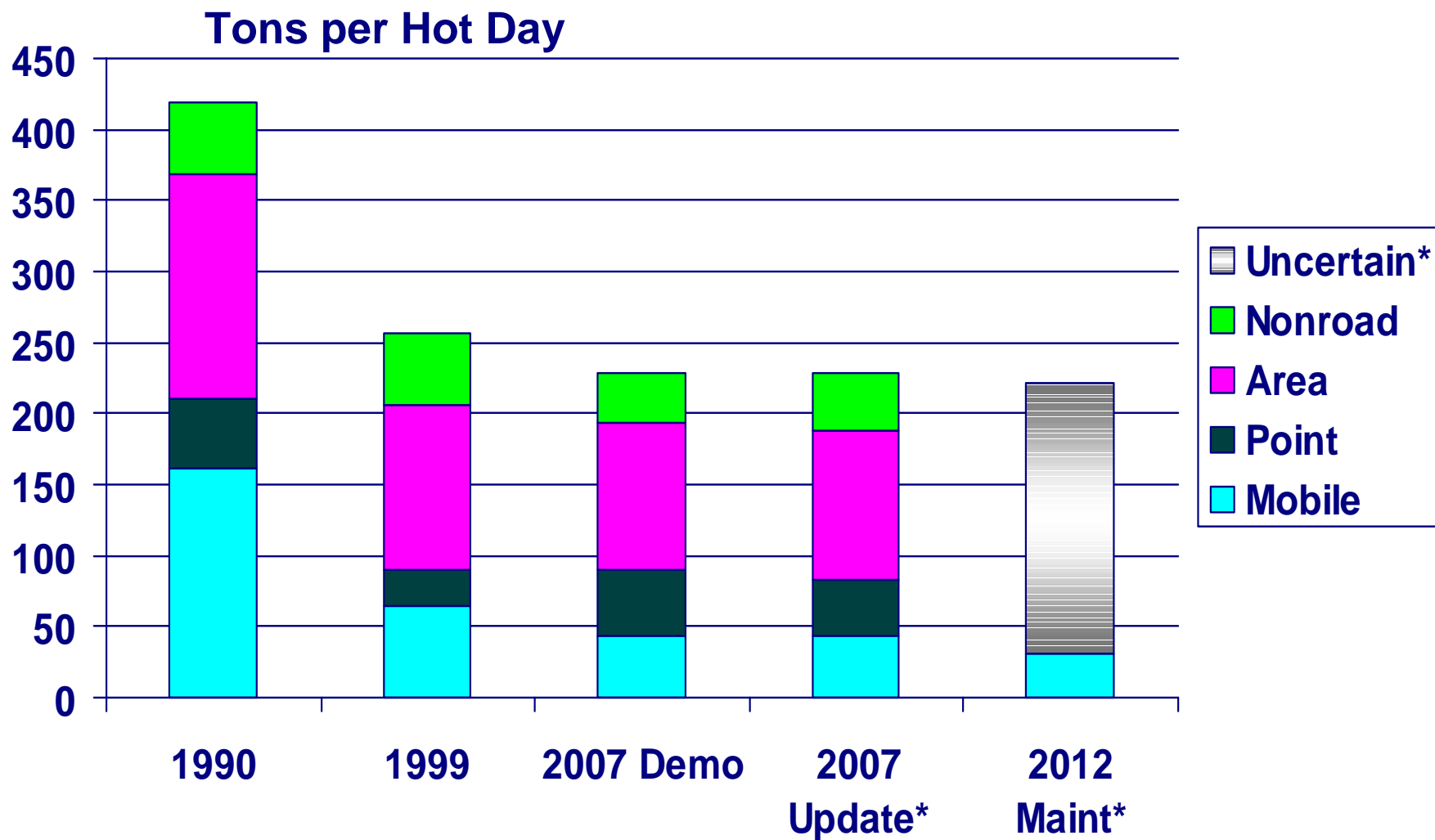
VOC Inventories - Work in Progress

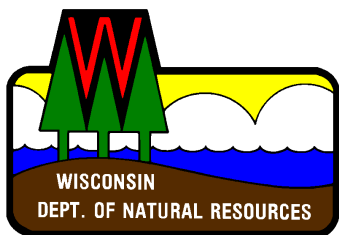
Total VOC – Tons per Hot Summer Day

	1990 Baseline	1999 Attain	2007 Att Demo	2007 Update	2012 Maintenance
6 County	352	208	184	***	***
Sheboygan	29	17	15	***	***
Manitowoc	22	17	15	***	***
Kewaunee	4.8	7.4	~7.0	***	***
Door	10.6	6.7	~7.0	***	***
10 County	419	256	228	***	***



VOC Inventories - Work in Progress

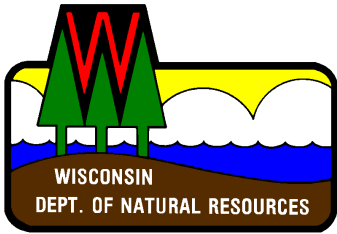




NOx Inventories - Work in Progress

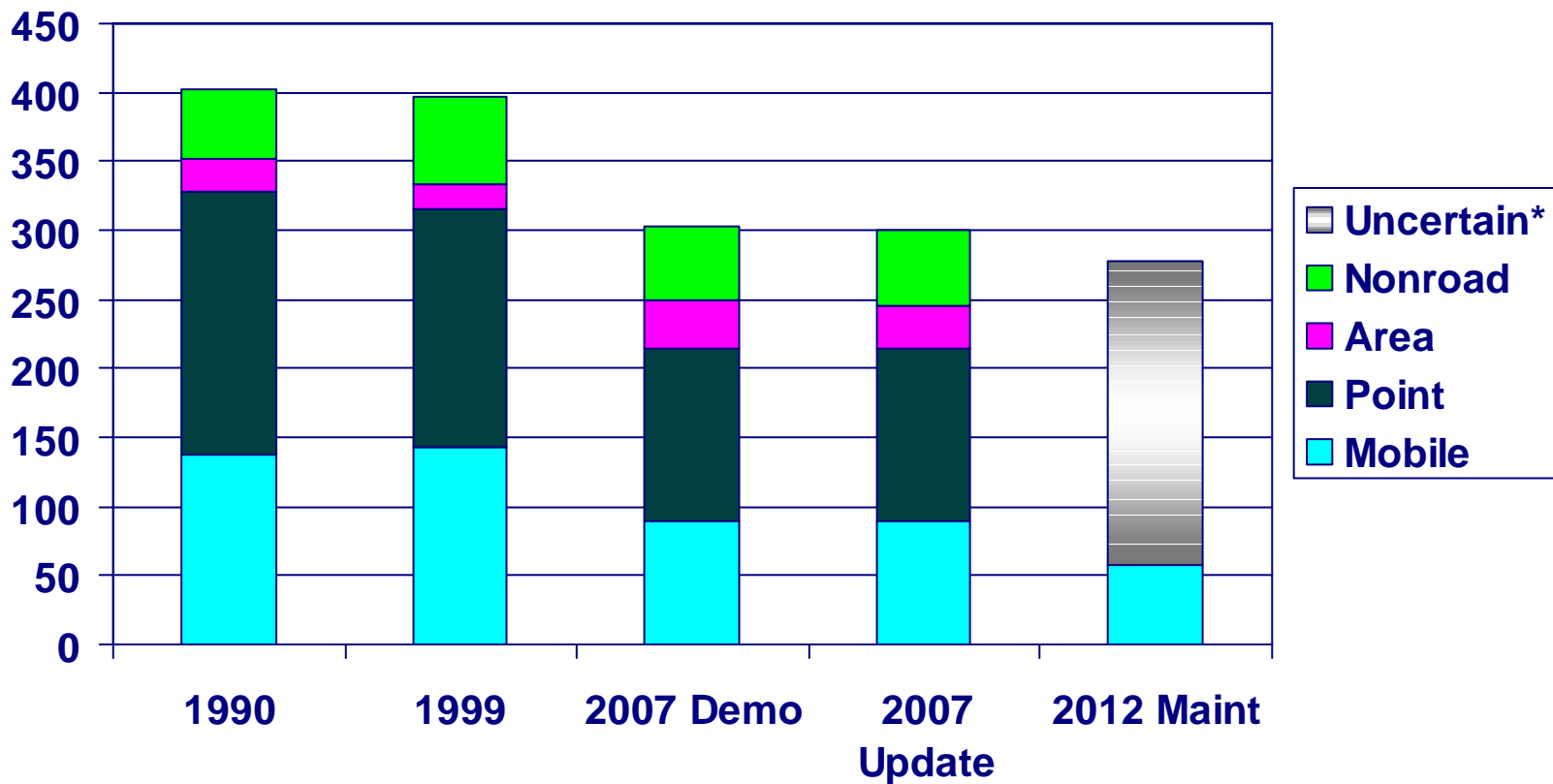
Total NOx – Tons per Hot Summer Day

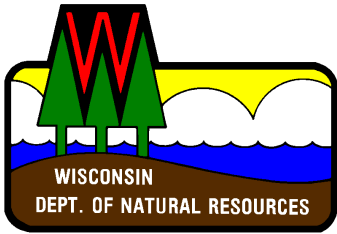
	1990 Baseline	1999 Attain	2007 Att Demo	2007 Update	2012 Maintenance
6 County	305.4	305.0	236.1	***	***
Sheboygan	74	66	42.1	***	***
Manitowoc	15.6	16.3	16.8	***	***
Kewaunee	2.2	2.5	~2.5	***	***
Door	5.5	6.2	~6.5	***	***
10 County	403	396	~304	***	***



NO_x Inventories - Work in Progress

Tons per Hot Day

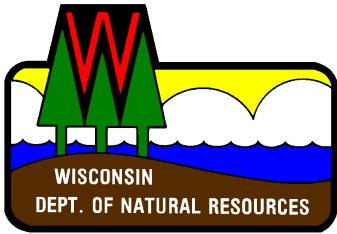




④ *Contingency Plan Overview*

Regional Contingency Plan - Geography & Approach

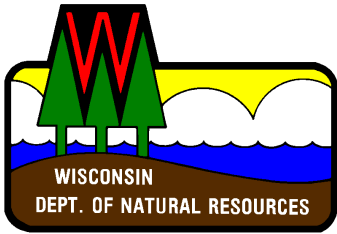
- ◆ Commitments are made on a process and timing for contingent response - this is consistent in the requests
- ◆ Any added **Controls** triggered to address 1-Hr Ozone Maintenance will be chosen and focused through a regional (3 state) technical assessment & dialogue
- ◆ Any triggered **Technical Evaluations** look at the aggregate *Maintenance Area* - IL/IN/WI
 - includes a 10 WI area



④ *Contingency Plan Overview*

Regional Contingency Plan - Commitments on Timing

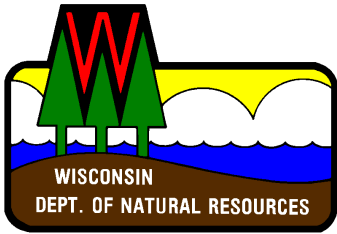
- ◆ Commitments on Technical Evaluation Start & Duration
- ◆ Commitments on Speed of any “Triggered” Contingent Emissions Control Program Implementation
- ◆ Sensitive to evaluation period (early vs later in decade):
 - **Essentially, the later the year of identified control program need, the faster the control commitment window**
 - **Maintenance Plan is primarily based on continuing efforts already adopted at the state, regional & federal level**
 - **Flexibility to adopt a most appropriate control is retained**



④ *Contingency Plan Evaluations*

Commitment to Regional AQ & Emissions Trend Evaluations

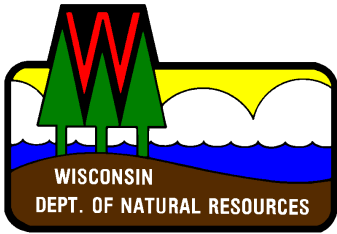
- ◆ **2003-2004** - *Not* triggered by Exceedance AQ Levels
Continuing ROP commitment should provide off-ramp if violate
- ◆ **2005-2007** - Triggered by 2 exceedances at any one site during that period
- ◆ **2008-2012** - Triggered by 2 exceedances or a 5% regional inventory growth in reported 2005/2008 over 1999 maintenance inventory levels (VOC or NO_x)
- ◆ **Technical Evaluation** drives dialogue on need for any targeted emissions control response in region



④ *Contingency Plan Controls Commitment*

Commitment to Contingent Emissions Control Programs (VOC &/or NO_x)

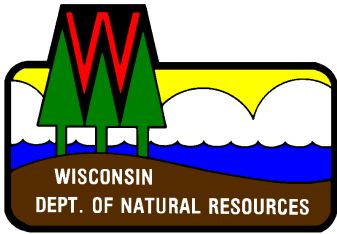
- ◆ **2003-2007** - *Not* “automatically” triggered by regional violations
- ◆ **2008-2012** - “Automatically” triggered by violation
- ◆ Also, a “**Possible Outcome**” of the AQ and emissions evaluations triggered by exceedances during 2005-2012 ... if shown caused by excessive regional growth or escalating emissions trend



④ *Contingency Plan - Listed Measures*

Period	Potential Contingency Measures in the Regional Maintenance Plan(s)	Sector
2003-2004	<p>Implementing Rate-of-Progress Controls</p> <ul style="list-style-type: none"> <i>No added Contingency Measures:</i> <p><i>-NOx SIPs, Fed Engine Regs, IN Refinery (BP), WI-NOx</i></p> 	NA
2005-2007	<ul style="list-style-type: none"> Enhanced VOL(C) Storage RACT [IN] Phase 2 of NOx SIP Call Fed Tier 2 Tailpipe Stds & Low Sulfur Fuel Heavy Diesel Stds & Low Sulfur Fuel Continued NOx I/M Federal Tier 2 and 3 Engine Stds 	<p>Point</p> <p>Mobile</p> <p>NonRoad</p>

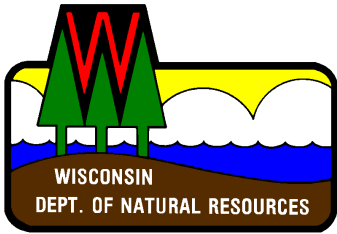
Period	Potential Contingency Measures Regional Maintenance Plan(s)	Sector
2008-2012	<ul style="list-style-type: none"> • Reinstate Offsets and/or LAER NSR (VOC) • RACT on Smaller Sources (VOC) • Tighten Existing RACT (VOC) • Expanded Geography for Existing Controls • New or added NOx Control Levels • <i>Other measures to be identified...</i> 	Point
	<ul style="list-style-type: none"> • High-Enhanced I/M (eg-OBD-2) • California (CA) Vehicle Stds (beyond Tier 2) • TCM's – incl area-wide ridesharing, telecommute, transit augments, traffic flow, etc. • <i>Other measures to be identified...</i> 	Mobile
	<ul style="list-style-type: none"> • CA Engine Stds (earlier Tier 3) • <i>Other measures to be identified...</i> 	NonRoad
	<ul style="list-style-type: none"> • CA AIM Coating Stds • CA Commercial/Consumer Product/Solvent Limits • Expanded Geography for Existing Controls • <i>Other measures to be identified...</i> 	Area



⑤ *Revised Conformity Numbers*

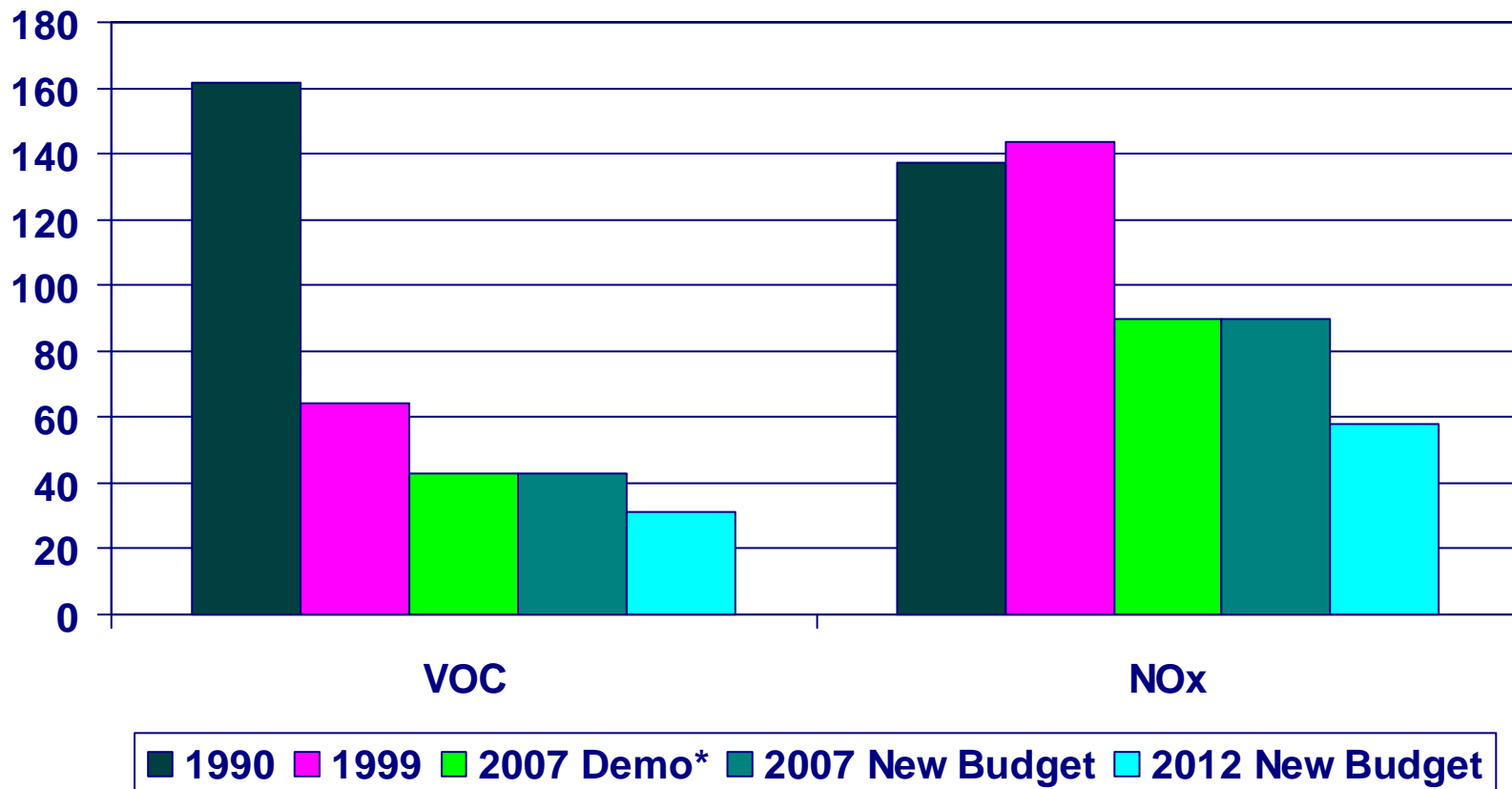
Adjusting Conformity Budgets & Updating TIP & Regional Transportation Plan Emissions Assessments

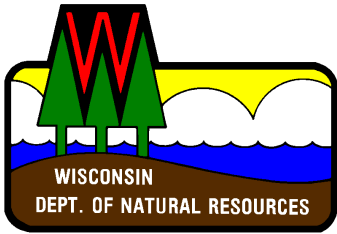
- ◆ ***Driver***= RPO's must pursue proscribed assessments based on attainment (Phase 3) plan budgets during 2002 (*18 month window - must complete at latest early in 2003*)
- ◆ ***Interim Budgets*** for assessments revised in Maintenance Plan (MOB-5) - submit Jun-Jul, w/Aug-Sep “adequacy”
- ◆ ***Final maintenance plan budgets*** will be based on MOB-6 - DNR submits Aug-Sep, w/ likely Nov-Dec approval
- ◆ March 15 & planned April 19 stakeholder dialogue getting RPO's, FHWA, EPA, DOT & DNR on same timelines



Draft Mobile Sector Inventories - Mobile 5

Tons per Hot Day - 10 County Emissions Budget

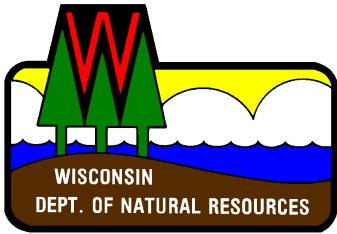




Redesignation to 1-Hr Ozone Attainment

Remaining Redesignation Package Components and Issues

- ◆ Stakeholder and Public Outreach Efforts
- ◆ Public Hearing on Draft Request and Maintenance Plan - June 12/13 Target
- ◆ Submittal of Refined Package



Ozone Redesignation Questions ?

WI-DNR Air Management Website:

- ◆ www.dnr.state.wi.us/org/aw/air/hot/1hr_redes/index.htm
- ◆ or, go to DNR Web, Bureau of Air Management, “Hot Topics”

Web Info:

- ◆ NR Board Memo(s) on Redesignation Process and Schedules
- ◆ Fall 2001 Presentation and Oct 25 Q&As
- ◆ *Soon - Jan 2002 Update Presentation and a Contingency Plan Structure Proposal - Lake Michigan 1-Hr Ozone*
- ◆ *Soon - April Maintenance Plan and Redesignation Outline*

Redesignation Contact: Bob Lopez - 608-267-5284